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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,062	08/22/2003	Hongsheng Zhong	018360-254508	9710
826	7590	05/18/2006	EXAMINER	
ALSTON & BIRD LLP BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NC 28280-4000			LUU, MATTHEW	
			ART UNIT	PAPER NUMBER
			3663	

DATE MAILED: 05/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/647,062	Applicant(s) HONGSHENG ZHONG	
	Examiner LUU MATTHEW	Art Unit 3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8,31 and 32 is/are pending in the application.
- 4a) Of the above claim(s) 9-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8,31 and 32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/04; 11/10&14/03</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION***Oath/Declaration***

It does not include the notary's signature, or the notary's signature is in the wrong place.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "an average cell visit frequency" and "a minimum average cell", as recited in claim 1; "an average grid segment visit frequency" and "an minimum average grid segment", as recited in claim 31, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must

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be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-8, 31 and 32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding claims 1 and 31, lines 1-2, the preamble recites "A method of optimizing a route plan having a plurality of routes within a service territory, comprising". However, the body of claims 1 and 31 does not provide any connection with respect to "A method of optimizing a route plan having a plurality of routes within a service territory" as recited in the preamble. Therefore, it is unclear how the steps in the body of the claims 1 and 31 support the claimed "method of optimizing a route plan".

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Regarding claim 1, lines 5-6, “plurality of unassigned cells based upon an average cell visit frequency to each of said plurality of unassigned cells”, it is unclear what exactly is “an average cell visit frequency”. Where exactly in the specification and drawings that discloses “an average cell”? How exactly “an average cell” can be determined or calculated?

Claim 1, lines 7-9, “wherein said average cell visit frequency represents a comparison between a number of visits to each of said unassigned cells during said reference period and a number of total visits to any of said plurality of unassigned cells during said reference period”, again, it is unclear how “an average cell visit frequency” can be calculated by the comparison?

Claim 1, line 10, “establishing a minimum average cell visit frequency”, it is unclear where exactly in the specification and drawings that describes “a minimum average cell”. What is the difference between “an average cell” and “an minimum average cell”?

Claim 1, line 11, “classifying each of said unassigned cells as a core cell”, it is unclear how exactly the unassigned cells can be classified as a core cell. It is unclear under what condition or requirement that the unassigned cells can be classified as a core cell.

Regarding claim 4, line 3, “classifying one or more of said unassigned cells as a flex zone cell”, it is unclear how exactly the unassigned cells can be classified as a flex zone cell. It is unclear under what condition or requirement

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that the unassigned cells can be classified as a flex zone cell. What exactly is a “flex zone cell”?

Regarding claim 6, line 2, “classifying each remaining unassigned cell as a daily cell”, it is unclear how exactly the unassigned cells can be classified as a “daily cell”. It is unclear under what condition or requirement that the unassigned cells can be classified as a “daily cell”. What exactly is a “daily cell”?

Regarding claim 31, lines 5-6, “plurality of grid segments based upon an average grid segment visit frequency to each of said plurality of grid segments”, it is unclear what exactly is “an average grid segment visit frequency”. Where exactly in the specification and drawings that discloses “an average grid segment”? How exactly “an average grid segment” can be determined or calculated?

Claim 31, lines 7-9, “wherein said average grid segment visit frequency represents a comparison between a number of visits to each of said unassigned cells during said reference period and a number of total visits to any of said plurality of grid segments during said reference period”, again, it is unclear how “an average grid segment visit frequency” can be calculated by the comparison?

Claim 1, line 10, “establishing a minimum average grid segment visit frequency”, it is unclear where exactly in the specification and drawings that describes “a minimum average grid segment”. What is the difference between “an average grid segment” and “an minimum average grid segment”?

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Claim 1, line 11, "classifying each of said grid segments as a core cell", it is unclear how exactly the grid segment can be classified as a core cell. It is unclear under what condition or requirement that the grid segment can be classified as a core cell.

Dependent claims are also rejected for incorporating the defects from their respective parent claims by dependency.

Election Without Traverse

Applicant's election without traverse of invention I (claims 1-8, 31 and 32) in the reply filed on March 15, 2006 is acknowledged.

Claims 9-30 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected inventions II-VIII, there being no allowable generic or linking claim.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUU MATTHEW whose telephone number is (571) 272-7663. The examiner can normally be reached on Flexible Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JACK KEITH can be reached on (571) 272-7663. The fax

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phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M. Luu

A handwritten signature in black ink, appearing to read "Matthew Luu", with a large, stylized initial "M" and a long, sweeping underline.

MATTHEW LUU
PRIMARY EXAMINER